



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,110	12/26/2001	David R. Davis	450.232US2	1032
32710	7590	11/08/2005	EXAMINER	
Stites & Harbison PLLC TransPotomac Plaza 1199 North Fairfax Street, Suite 900 Alexandria, VA 22314-1437			CHANG, YEAN HSI	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/034,110

Applicant(s)

DAVIS ET AL.

Examiner

Yean-Hsi Chang

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6,32-34,36-38 and 40-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,32-34,36-38,40-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 9/15/05 has been entered.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "an isolation assembly", "an alternate passage", and "a second fan" in claims 1 and 34 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. In the figures, it is also unclear what is the relationship of wall 23 and wall 24, the relationship of computer case wall 20 and cooling assembly 12, the relationship of computer case wall 22 and cooling assembly 12, and which wall is designated by 28.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The subject matters, such as: "an isolation assembly", "an alternate passage" and "a second fan suitable for passing air through the alternate passage" are not found in the specification of the disclosure.

The rejection that follows is based on the Examiner's best understanding of the claims.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3-6, 32-34, 36-38, 40-41 and 44-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Behl (US 6,185,097 B1).

Behl teaches a cooling assembly (150, fig. 10) for at least one board (shown in fig. 9, with a connector attached on, not labeled) having mounted thereon a plurality of components (shown in figs. 6, 9 and 10) including a first component (14), comprising: a passage (through one of 30s, fig. 10), a first fan (one of 30s, fig. 10) suitable for passing air through the passage, an isolation assembly (fig. 6) for generally enclosing heat generated from the first component mounted on the at least one board, being removably attachable to a computer case (10, fig. 1) without opening the computer case, and being separate from another heat-sensitive component (another 14, fig. 1), an alternate passage (through another 30, fig. 10) configured to provide an air flow path to the

isolation assembly, and a second fan (another 30, fig. 10) suitable for passing air through the alternate passage (claims 1, 3, 34 and 36); a passive heat sink (20) operatively coupled to the first component (claims 4, 32, 37 and 40); wherein the plurality of components are enclosed in a case (134), and air is drawn from outside (indicated by arrow 22, fig. 1) (claims 5-6 and 38); wherein the isolation assembly is configured to shield the first component from an amount of EMI (28 is part of the assembly; also see col. 3, lines 6-13) (claims 33 and 41); an exhaust hole (on a rear wall of 10, not numbered, fig. 1) in communication with the passage and suitable for venting air through the computer case (claims 44 and 48); an air path (shown in fig. 1, not numbered) from the first fan through the exhaust hole passes through the passage (claims 45 and 49); and wherein the cooling assembly is configured such that substantially all of the air passing through the first fan is vented through the exhaust hole (shown in fig. 1) (claims 46-47 and 50-51).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 42 and 43 rejected under 35 U.S.C. 103(a) as being unpatentable over Behl in view of Papa et al. (US 6,175,490 B1).

Behl discloses the claimed invention except the first component comprising a processor.

Papa teaches a processor (200, fig. 2) enclosed in an isolation assembly (103, fig. 3A; see also col. 4, lines 16-22).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the isolation assembly of Behl with the isolation assembly taught by Papa et al. such that the heat generated by the processor could be effectively handled by the cooling assembly, since processors are heat-generating sources.

### ***Response to Arguments***

8. Applicant has not raised an argument under the heading "Remarks" of the communication files 9/15/05.

### ***Correspondence***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-2038. The examiner can normally be reached on 07:30 - 16:00, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization

Art Unit: 2835

where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

Yean-Hsi Chang  
Primary Examiner  
Art Unit: 2835  
November 6, 2005



**YEAN-HSI CHANG**  
**PRIMARY EXAMINER**